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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,524	02/17/2004	Eddy Reynolds	200313753-1	2441

22879 7590 07/21/2006

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EXAMINER	
HASSAN, AURANGZEB	
ART UNIT	**PAPER NUMBER**
2182	

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,524	REYNOLDS, EDDY	
	Examiner	Art Unit	
	Aurangzeb Hassan	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species I, claims 1 – 22 in the reply filed on 5/11/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 13 – 16 and 18 - 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As disclosed in the applicant's specification page 7 lines 22 – 25, claims 13 – 16 and 18 – 22 do not necessarily recite hardware and are directed to a computer program and computer program claims as computer lists per se are neither computer components nor statutory processes, as they are not "acts" being performed.

4. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (non-statutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 7 – 14, 18, 20 – 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Mackiewicz et al (US Patent Number 4,713,756 hereinafter "Mackiewicz").

7. As per claims 1 and 13, Mackiewicz teaches a method and system for signaling write status, the system comprising: means for detecting transfer of data (processor acknowledges LOAD/STORE data signals on port, column 2, lines 64 – 67) to an external storage device (non-volatile memory device 100, figure 1) plugged into an input/output port associated with a computer (I/O port to which memory device connected, column 2, lines 62 – 64, attached via external interface 40, figure 1); means for activating a write-in-progress indicator (Busy signal LED 136, figure 1) that signals that writing has not been completed by the external storage device (BUSY indication, column 5, lines 12 – 17); means for determining when the external storage device has completed writing; and means for deactivating the write-in-progress indicator when it is

determined that writing has been completed (enable and disable of BUSY indicator and LED, column 3, lines 3 – 16 and lines 26 – 32).

8. As per claims 2 and 14, Mackiewicz teaches a method wherein detecting transfer of data comprises detecting transfer of data (processor acknowledges LOAD/STORE data signals on port, column 2, lines 64 – 67) to an external storage device (non-volatile memory device 100, figure 1) plugged into an input/output port of the computer (I/O port to which memory device connected, column 2, lines 62 – 64, attached via external interface 40, figure 1).

9. As per claims 7 and 8 Mackiewicz discloses a method wherein activating a write-in-progress indicator comprises activating a light-emitting diode associated with the input/output port (BUSY indication signal represented by the light emitting diode 136 figure 1, column 5, lines 12 – 16)

10. As per claims 9 and 20, Mackiewicz teaches a method wherein activating a write-in-progress indicator comprises issuing an advanced configuration power interface command to a switch that controls the indicator (CLK and D signal to switch, element 226, figure 2b).

11. As per claim 10, Mackiewicz teaches a method comprising determining when the external storage device has completed writing and deactivating the write-in-progress

indicator when it is determined that writing has been completed (memory verifies that a write operation has completed and the BUSY indicator and LED and ready for the next awaiting transfer, column 3, lines 3 – 16).

12. As per claim 11, Mackiewicz teaches a method wherein determining when the external storage device has completed writing comprises communicating (processor 20 communicates via data busses 12 and 112 of memory 100, figure 1) with the external storage device to obtain information regarding a write status of the external storage device (ready to transfer to memory, column 5, lines 1 – 9).

13. As per claim 12, Mackiewicz teaches a method wherein communicating with the external storage device comprises sending a command requesting confirmation (in response to STORE/LOAD command request initializes busy signal, column 3, lines 9 – 16) when writing is completed or a query requesting an indication as to whether writing is completed (indication of completion is represented in enabling of ports and release of busy signal LED, column 3, lines 9 – 16).

14. As per claim 18, Mackiewicz teaches a system stored on a computer-readable medium, the system comprising: logic configured to activate a write-in-progress indicator (processor acknowledges LOAD/STORE data signals on port, column 2, lines 64 – 67 and activates BUSY indicator, column 3, lines 3 – 6) when data is transferred to an external storage device (non-volatile memory device 100, figure 1) that is plugged

into an input/output port associated with a computer (I/O port to which memory device connected, column 2, lines 62 – 64, attached via external interface 40, figure 1), the indicator (LED 136, figure 1) signaling that writing has not been completed by the external storage device (BUSY indication, column 5, lines 12 – 17); logic configured to determine when the external storage device has completed writing; and logic configured to deactivate the write-in-progress indicator when it is determined that writing has been completed (enable and disable of BUSY indicator and LED, column 3, lines 3 – 16 and lines 26 – 32).

15. As per claim 21, Mackiewicz teaches a system wherein the logic configured to determine when the external storage device has completed writing comprises logic configured to send a command (in response to STORE/LOAD command request initializes busy signal, column 3, lines 9 – 16) or query to the external storage device requesting information regarding a write status of the external storage device (status represented by busy signal, column 3, lines 9 – 15).

16. As per claim 22, Mackiewicz teaches a system wherein the logic configured to send a command or query is configured to request a confirmation (in response to STORE/LOAD command request initializes busy signal, column 3, lines 9 – 16) notification that writing has been completed (confirmation indication of completion is represented in enabling of ports and release of busy signal LED, column 3, lines 9 – 16).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claims 3 – 6, 15 – 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackiewicz in view of Huang (US Publication Number 2002/0171999).

19. As per claims 3, 5 and 15, Mackiewicz teaches a method wherein detecting transfer of data comprises detecting transfer of data to an external storage device plugged into an input/output port (I/O port to which memory device connected, column 2, lines 62 – 64, attached via external interface 40, figure 1).

Mackiewicz does not disclose the geographical location of how the memory is attached to the computer.

Huang teaches a method wherein an input/output port of a connector hub is provided in a front panel of the computer (figure 2 is a built in hub accessible on the front panel of a computer, paragraph [0014] with input/output ports elements 221 – 223).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Mackiewicz with the above teachings of Huang. One would be motivated to make such modifications in order to maximize portability of memory in a computer environment (paragraph [0006]).

20. As per claims 4, 6, 16 and 17 Mackiewicz teaches activating a write-in-progress indicator light (LED 136, figure 1).

Mackiewicz does not disclose the geographical placement of the light-emitting diode on a hub.

Huang discloses a light-emitting diode adjacent (next to) the input/output port of a connector hub on the computer (LED indicator adjacent to element 222, figure 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Mackiewicz's light-emitting diode to be represented by the positioned light-emitting diode indicator taught in Huang as it is simply a placement of parts. One of ordinary skill would have been motivated to make such modification in order to have an accurate interface for the user.

21. Mackiewicz modified by the teachings of Huang as applied in claim 4 above, as per claim 19, Huang teaches a system wherein the logic configured to activate a write-in-progress indicator comprises logic configured to activate an indicator adjacent the input/output port (LED indicator adjacent to element 222, figure 2).

Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571) 272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH

KIM HUYNH
SUPERVISORY PATENT EXAMINER
7/19/06